

Claims

1. (Previously Presented) A process for improving processability of mono- and multi-layer polymer shrink-films, comprising

adding a photoinitiator to a polymeric composition of which said monolayer film or at least one layer of said multilayer film is made, wherein said polymeric composition does not include polymer cross-linking enhancers,

extruding said composition,

illuminating said extruded composition with ultraviolet radiation, to induce cross-linking within said layer or layers of the film, the amount of said photoinitiator and the intensity and duration of said illumination being such as to provide a gel content below 10%, and

submitting said composition to an orientation treatment.

2. (Previously Presented) A process according to claim 1, wherein the orientation treatment is performed using a double-bubble technique.

3. (Previously Presented) A process according to claim 1, wherein the polymeric composition is selected from the group consisting of polyethylene, ethylene copolymers, and mixtures thereof.

4. (Previously Presented) A process according to claim 3, wherein the ethylene copolymers are selected from the group consisting of LLDPE, LDPE, m-LLDPE, EVA, EBA, ULDPE, and mixtures thereof.

5. (Previously Presented) A process according to claim 1, wherein the amount of photoinitiator is up to 1 weight percent of the composition.

6. (Previously Presented) A process according to claim 1, wherein the film to be produced is a monolayer film.

7. (Previously Presented) A process according to claim 1, wherein the film is a multilayer film.

8. (original) A process according to claim 7, wherein no photoinitiator is added to one or more of the layers.

9. (original) A process according to claim 1, wherein the cross-linked material of one layer is chosen such that it provides strength and impermeability to the film.

10. (Previously Presented) A process according to claim 9, wherein the cross-linked material(s) of one or more external layer(s) are chosen such that the cross-linked material(s) provide sealability to the film.

11. (Previously Presented) A process according to claim 1, wherein the orientation treatment is performed using a tenter technique.

12. (Withdrawn) ~~A monolayer shrink film which does not include polymer cross linking enhancers and is cross linked to the extent that film comprises a gel content below 10%.~~

13. (Withdrawn) ~~A multilayer shrink film, which does not include polymer cross linking enhancers, having some of the layers of the multilayer shrink film cross linked to the extent that the cross linked layers comprise a gel content below 10%, and other layers of the multilayer shrink film are not cross linked.~~